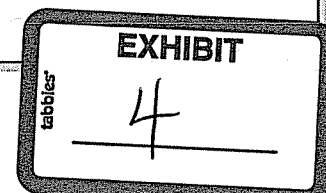


IN THE UNITED STATES DISTRICT COURT FOR THE
NORTHERN DISTRICT OF OKLAHOMA

W. A. DREW EDMONDSON, in his)
capacity as ATTORNEY GENERAL)
OF THE STATE OF OKLAHOMA and)
OKLAHOMA SECRETARY OF THE)
ENVIRONMENT C. MILES TOLBERT,)
in his capacity as the)
TRUSTEE FOR NATURAL RESOURCES)
FOR THE STATE OF OKLAHOMA,)
Plaintiff,)
vs.) 4:05-CV-00329-TCK-SAJ
TYSON FOODS, INC., et al,)
Defendants.)

THE VIDEOTAPED DEPOSITION OF
CHRISTOPHER TEAF, PhD, produced as a witness on
behalf of the Defendants in the above styled and
numbered cause, taken on the 31st day of January,
2008, in the City of Tulsa, County of Tulsa, State
of Oklahoma, before me, Lisa A. Steinmeyer, a
Certified Shorthand Reporter, duly certified under
and by virtue of the laws of the State of Oklahoma.

TULSA FREELANCE REPORTERS
918-587-2878



1 it's the physician or whether it's the individual,
2 may not know.

3 Q And why wouldn't it be true that you have to
4 look at each individual record in Adair County, just
5 as well as in the other counties we've discussed?

02:12PM

6 A It would be valuable to do that. Having done
7 that, however, you may not know everything that you
8 need to know. As we said a couple of different
9 times, these are characteristically -- and we know
10 that they are underreported by a wide margin. So
11 whatever this number is, it's certainly greater than
12 that in real life.

02:13PM

13 Q Do we know E. coli is a major -- cattle are a
14 major source of E. coli in the environment?

15 A Cattle are one of the sources of E. coli.

02:13PM

16 Q They're a major sources, aren't they?

17 A They're one of the major sources.

18 Q All right. Do we know that there are cattle
19 that are grazed extensively in Adair County?

20 A There are cattle that are grazed in Adair
21 County.

02:13PM

22 Q Do we know there are cattle that are grazed
23 extensively in Harper County?

24 A I don't know that.

25 Q Do we know whether cattle are grazed

02:13PM

1 Q I assuming it's based on reliable information.

2 I'd like you to assume the same thing. If it were

3 20 percent instead of 8 percent or in excess of 20

4 percent, would that in any way affect your opinion

5 about it as a potential source of the risk?

03:31PM

6 A No, I don't think it would. It would change

7 the number that would be allocated to failing septic

8 systems, but I don't believe it would change its

9 significance to the overall picture.

10 Q What assumption would you make with respect to

03:31PM

11 the contribution of cattle to the watershed?

12 A Once again, using the USDA census information

13 and information about land use in the Illinois River

14 watershed and quantities of fecal material released

15 per animal per day, you can make an estimate of the

03:31PM

16 relative importance of loading from cattle.

17 Q And is that how you calculated the fecal

18 coliform load from cattle?

19 A Yes.

20 Q Do you agree that cattle are a source of

03:31PM

21 bacteria in the watershed?

22 A Bacteria (sic) are one of the sources of

23 bacteria in the watershed.

24 Q And septic tanks are a source of bacteria in

25 the watershed?

03:32PM

1 A They are, and the importance of those goes not
2 only to the loading but also to the way in which
3 that material was introduced in the environment, the
4 circumstances.

5 Q How do cows introduce their material into the 03:32PM
6 environment?

7 A Defecate on the ground.

8 Q Or in the streams?

9 A Perhaps.

10 Q Or in the ravines? 03:32PM

11 A Or in the forests.

12 Q Or in the streams?

13 A I think you said that.

14 Q Or in the springs?

15 A You know, all those things are possible, but I 03:32PM
16 think, based on the information that's available to
17 me from -- particularly from Dr. Olsen through the
18 chicken and bacterial fingerprinting or signatures,
19 it's clear that the bacteria are far more likely to
20 be related to the chickens than the cow. 03:33PM

21 Q Do you know if, talking about this DNA
22 sampling that took place, this diagnosis of the
23 presence in the watershed from poultry, do you
24 recall that, Dr. Harwood's work?

25 A I don't know that I calculated it quite that 03:33PM